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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,616	08/16/2006	Yasunori Morimoto	KAW-351-PCT	8665
<sup>28892</sup> SNIDER & AS	7590 10/17/200 SOCIATES		EXAMINER	
P. O. BOX 276			MAI, ANH T	
WASHINGTO	N, DC 20038-7613		ART UNIT	PAPER NUMBER
	·		2832	
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			MAIL DATE	DELIVERY MODE
			10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commence	10/589,616	MORIMOTO ET AL.				
Office Action Summary	Examiner	Art Unit				
	Anh T. Mai	2832				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence addre	ess			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  ill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONED	i. ely filed the mailing date of this comm D (35 U.S.C. § 133).	·			
Status						
1) Responsive to communication(s) filed on						
· <u> </u>	action is non-final.					
3) Since this application is in condition for allowan		secution as to the m	erits is			
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-8 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1,2 and 6-8</u> is/are rejected.						
7)⊠ Claim(s) <u>3-5</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1.☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal Pa					
Paper No(s)/Mail Date <u>8/06</u> .	6) Other:	<b>T</b> F				

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oi [6525638] in view of Takahashi [4668544].

#### Oi discloses:

- a core which has two flange portions 16, 18 provided at ends of the core and is made of a magnetic material 12 [col 2, lines 60-62];
- a winding portion made up of a plurality of layers of conductor wound around the core
   between the two flange portions of the core;
- characterized in that the winding portion is divided into a plurality of sections 26, 28 between the two flange portions [figure 1].

Oi discloses the invention as claimed as cited above except for a layer of conductor is wound from one end to the other end in each section, and then layers of conductor are wound in alternately reversed directions. Takahashi discloses winding section 5a wherein a layer of wire is wound from one end to the other end in each section, and then layers of conductor are wound in alternately reversed directions as shown in figure 4. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use winding configuration as taught

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by Takahashi to the device as disclosed by Oi. The motivation would have been to provide improvement of a multi-layer hollow coil of a self-melting wire [column 3, lines 67-68]. Therefore, it would have been obvious to combine Takahashi with Oi.

With respect to claims 7-8, "transformer and antenna" have been seen as intended use (i.e., when the claim is directed to a circuit device, any recitation concerning the input or output signal of such circuit device or environment in which the circuit device is employed is not part of the inventive circuit device). Only structural and functional limitations are given patentable weight.

3. Claim 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oi in view of Takahashi as applied in claim 1 and further in view of Kijima [59-126610].

Oi in view of Takahashi discloses the claimed invention as cited above except for a boundary surface between adjacent sections inclines to the flange portion of a winding start and the boundary surface of an upper layer is closer to the flange portion than the boundary surface of a lower layer. Kijima discloses as shown in figures 2-5, a boundary surface between adjacent sections inclines to the flange portion of a winding start and the boundary surface of an upper layer is closer to the flange portion than the boundary surface of a lower layer. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use winding configuration as taught by Kijima to the device as disclosed by Oi in view of Takahashi. The motivation would have been reduce potential difference and distribut4d capacity and improve dielectric strength and efficency. Therefore, it would have been obvious to combine Kijima in view of Takahashi and further in view of Oi.

## Allowable Subject Matter

4. Claims 3-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 recites inter alia; at least a portion near an upper layer of an end face facing the flange portion is apart from the flange portion so as to be farther from the flange portion than a lower layer of the end face.

Claim 4 recites inter alia; a flexible member which is detachably attached to the main portion and shaped like letter C in cross section.

The references of record do not teach or suggest the aforementioned limitation, nor would it be obvious to modify those references to include such limitation.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO892 Form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh T. Mai whose telephone number is 571-272-1995. The examiner can normally be reached on 5/4/9 Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anh T. Mai

Primary Examiner Art Unit 2832

ANH MAI PRIMARY EXAMINER

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